

Concept Note

2025 Annual Capacity Building Workshop on Utilizing Big Earth Data for the SDGs in SIDS- Supporting the Implementation of ABAS Commitments and the Pact for the Future

Date: 1-8 September 2025

Location: Beijing, China

Organizers:

International Research Center of Big Data for Sustainable Development Goals (CBAS)

United Nations Department of Economic and Social Affairs (UN DESA)

United Nations Global Geospatial Knowledge and Innovation Centre

China Association for Science and Technology (CAST)

Background and Rationale:

Small Island Developing States (SIDS) continue to face persistent challenges in data collection and analysis, which hinder effective monitoring of the Sustainable Development Goals (SDGs). The inaugural 2024 workshop, which brought together 10 participants from 10 SIDS countries, highlighted a strong demand for capacity-building in geospatial technologies. While notable progress has been made, significant gaps remain in institutionalizing these tools within national data systems and decision-making frameworks at the national level.

As a follow-up to both the Fourth International Conference on SIDS and the Summit of the Future, the 2025 Annual Capacity Building Workshop will support the implementation of its outcome document—the *Antigua and Barbuda Agenda for SIDS (ABAS): A Renewed Declaration for Resilient Prosperity*—to strengthen SIDS' capacities in science-based, data-driven decision-making for the SDGs, including through geospatial technologies. It is also aligned with the broader vision of the *Pact for the Future*, including harnessing science, technology, and innovation to drive evidence-based policies, address global inequalities, and ensure that digital tools contribute meaningfully to eradicating poverty, advancing climate resilience, and leaving no one behind..

Building on the success of the 2024 workshop, aligning with the Pact for the Future's call to "bridge STI divides," and recommendations of the 2025 STI Forum, which include *inter alia* increasing public and private investment in STI, bridging digital divides, establishing ethical governance for emerging technologies, transforming education, and enhancing international collaboration, this 2025 Workshop will focus on practical applications of Big Earth Data for SDG monitoring and policy implementation. It aims to bridge data gaps and enhance the technological and institutional capacities of SIDS in adopting digital tools for data management. The workshop will feature diversified knowledge-sharing formats, including lectures, seminars, and presentations, highlighting the potential of big data to advance SDG monitoring and implementation. Participants will gain expertise in state-of-the-art methodologies for SDG indicator monitoring and evaluation, supporting SIDS in tracking progress toward ABAS commitments.

In addition, the workshop will introduce strategic foresight methodologies to help SIDS policymakers anticipate emerging risks, explore future scenarios, and apply long-term thinking to sustainable development planning. The integration of foresight with Big Earth Data will support evidence-based policymaking and the implementation of ABAS and Pact for the Future commitments.

Objectives:

1. Enhance technical skills in Big Earth Data applications for SDG monitoring among SIDS representatives.
2. Institutionalize frameworks for integrating geospatial technologies into national policies.
3. Strengthen partnerships between SIDS, UN DESA, and CBAS through South-South knowledge exchange.
4. Promote practical tools for climate resilience planning, leveraging satellite imagery (e.g., SDGSAT-1) and AI-powered data analysis.
5. Support national implementation and monitoring of ABAS and Pact for the Future through digital innovation and Earth observation tools.

Themes/Sub-themes:

The overall theme of the project is "Advancing Sustainable Development through Science, Technology, and Innovation (STI)".

The sub-themes include:

- Geospatial Technologies for Resilience: Hands-on training in Big Earth Data platforms.
- Digital Transformation: Policy integration of remote sensing tools.
- STI Roadmaps: Aligning national strategies with SDG monitoring frameworks with Pact for the Future commitments.

Key Activities:

Hands-on Training Sessions

Participants will engage in practical exercises calculating SDG indicators using datasets from the China Big Earth Data Science Engineering Program (CBAS). These sessions will build technical capacity for monitoring sustainable development progress.

Field Visits to CBAS Facilities

The programme includes on-site demonstrations of SDGSAT-1 applications, where attendees will observe how satellite data and geospatial technologies support SDG implementation and environmental monitoring.

Policy Simulation Workshops

Through scenario-based exercises, participants will explore practical approaches to climate adaptation, testing how scientific data and technological solutions can inform policy decisions.

FBAS 2025 Engagement Activities

The project will coordinate side events during the Fourth Belt and Road Forum for International Science and Technology Cooperation (FBAS 2025) to highlight innovation successes from Small Island Developing States (SIDS), including the UNDESA Data for SIDS (DATAS) Initiative.

Target Audience:

The primary target group consists of around 22 representatives from 11 selected SIDS (2 representatives per country), including geospatial data experts, policymakers involved in data governance, management and SDG reporting and officials from national thinktanks who integrate diverse data sources for SDG planning, monitoring and assessments for ABAS/Pact for Future implementation. The tentative list of targeted SIDS is provided below and the final selection will be confirmed based on further consultations and participant

interest. Nominated representatives are expected to have relevant professional backgrounds to engage in mutual learning on digital Earth science and related policymaking mentioned above. **The secondary target group** is international partners (e.g., CBAS, UN-GGIM, ESRI and University of Denver) and invited UN entity staff.

Representatives from 2025 SIDS VNR Countries:

- Bahamas
- Dominican Republic
- Papua New Guinea
- Seychelles
- Suriname

Representatives from UNDESA DA Project Countries:

- Cabo Verde
- Guinea-Bissau
- São Tomé and Príncipe

Other Candidates Under Consideration:

- Jamaica
- Fiji
- Maldives
- Mauritius